

FIG.2

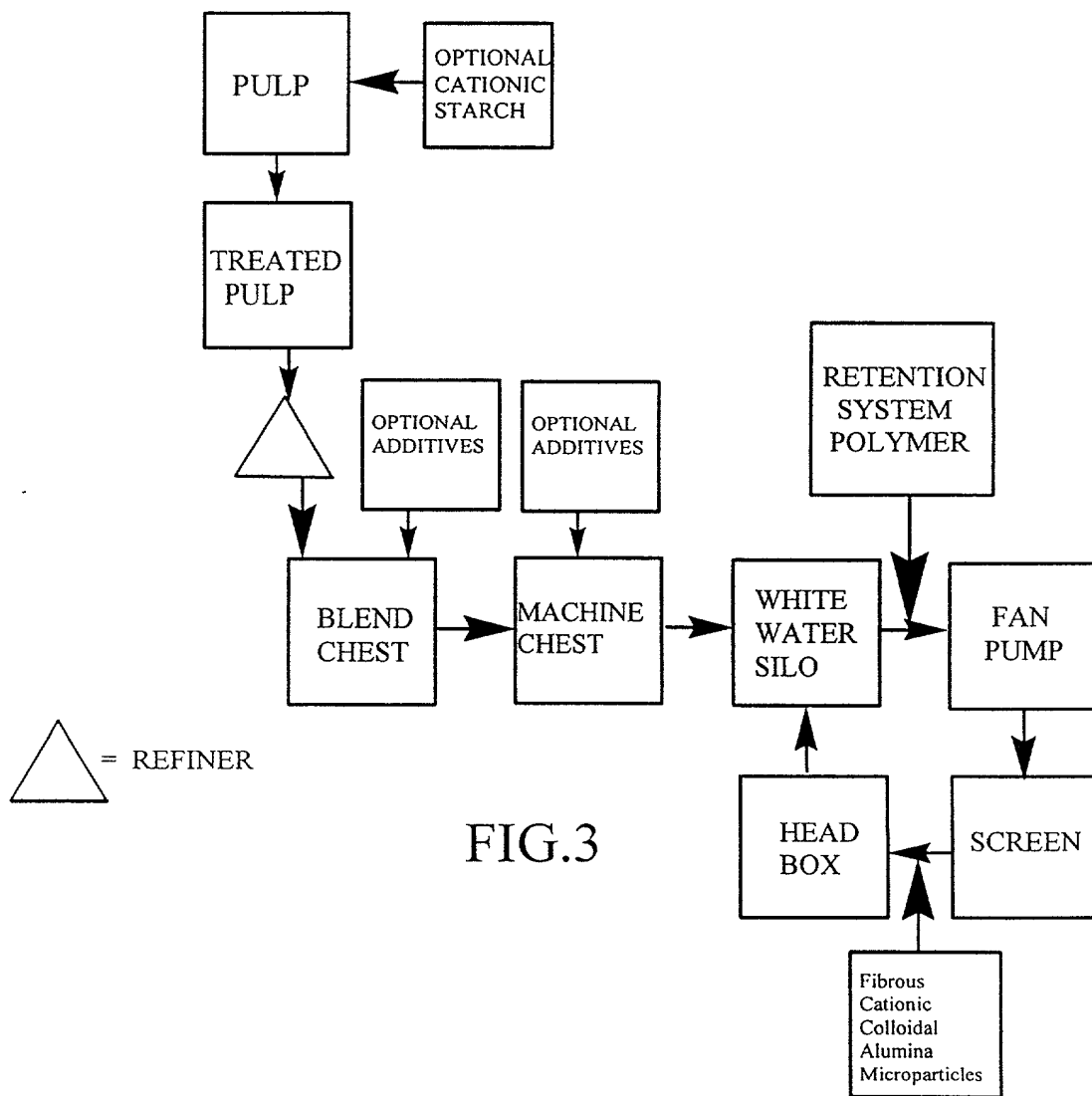


FIG.3

# Newsprint - Turbidity

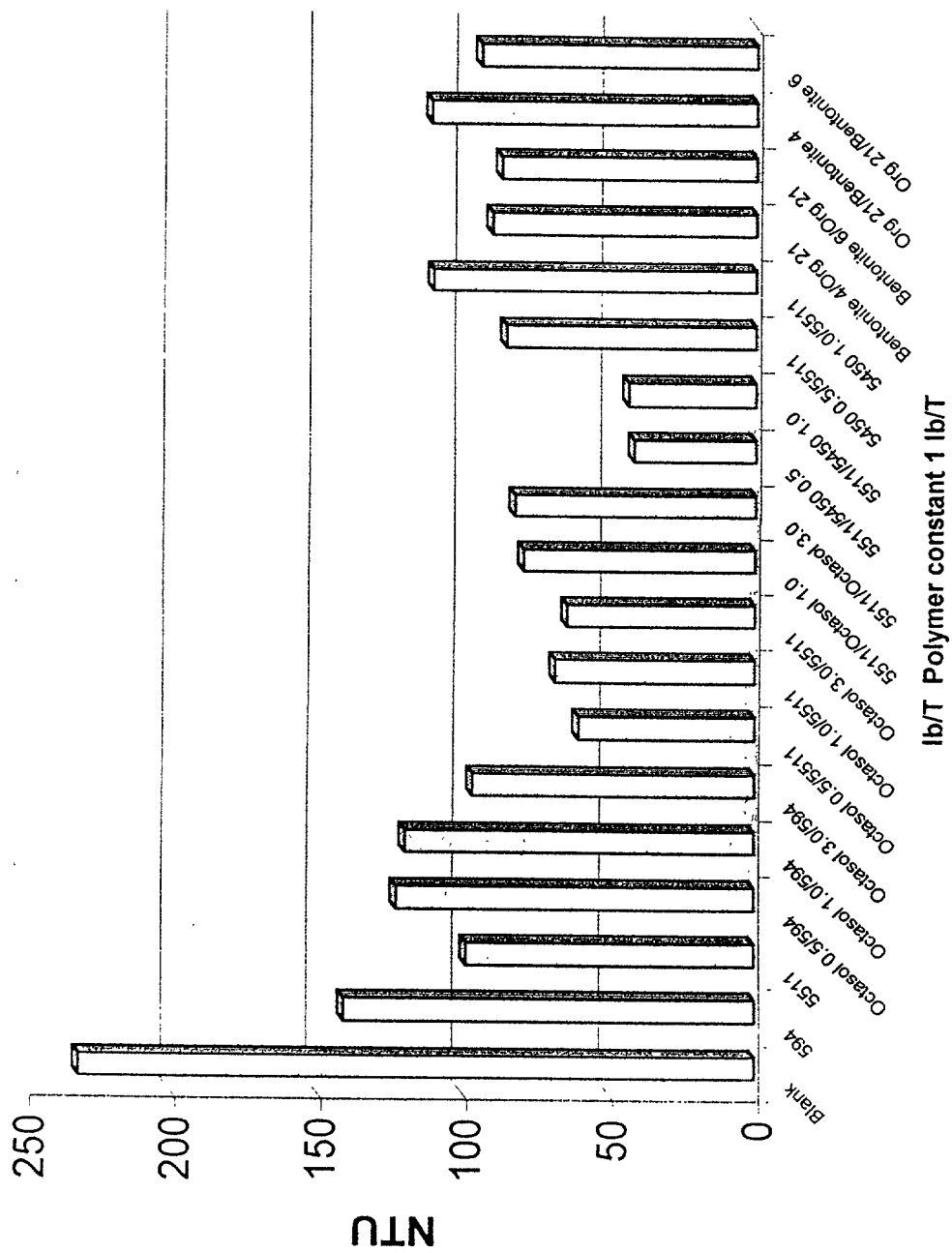


FIG. 4

[illegible]

FIG. 5

FIG. 6 is a bar chart showing the drainage time in seconds for various samples. The y-axis is labeled 'Seconds' and ranges from 0 to 70. The x-axis is labeled 'lb/T' and lists the samples: Blank, 5511, Octasol 1.0/5511, 5511/5450 1.0, Bentonite 4/Org 21, and Bentonite 6/Org 21. The drainage times are approximately: Blank (65s), 5511 (40s), Octasol 1.0/5511 (35s), 5511/5450 1.0 (15s), Bentonite 4/Org 21 (30s), and Bentonite 6/Org 21 (30s).

## Drainage

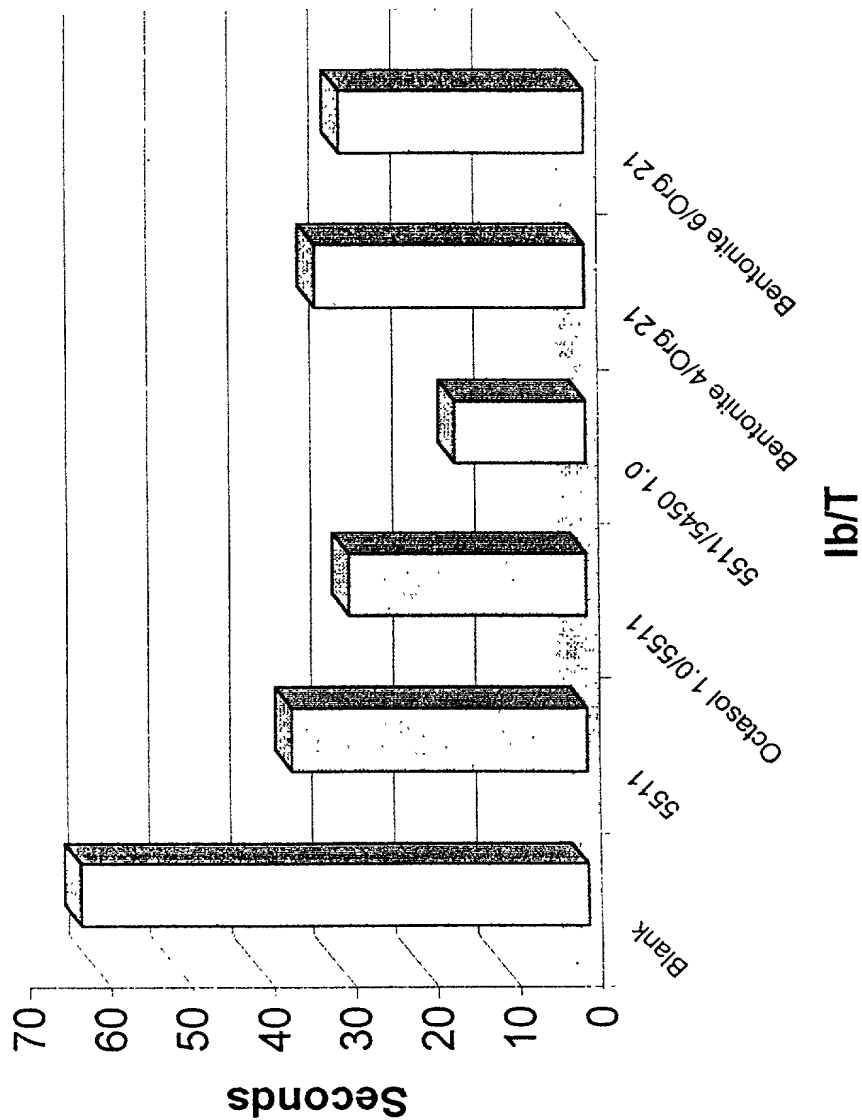


FIG. 6

# Comparison against dual component system

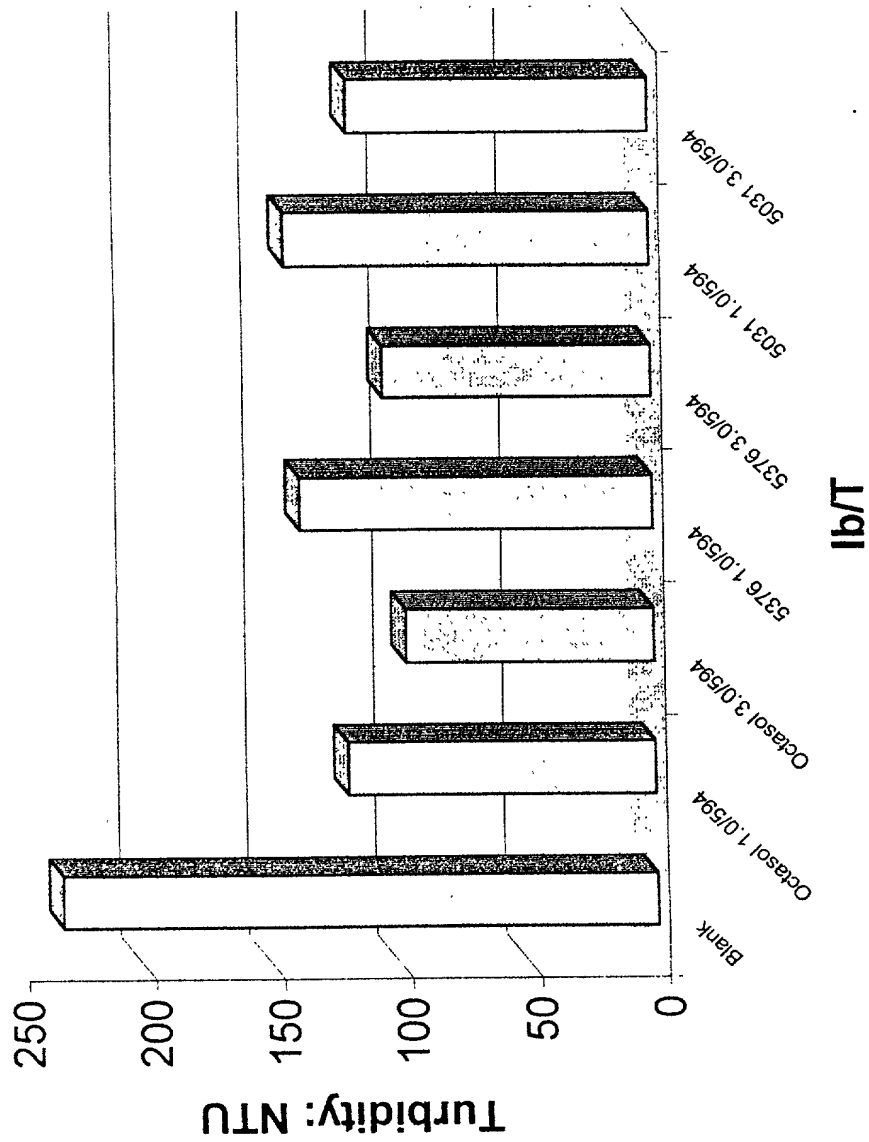


FIG. 7

# Comparison against dual component system

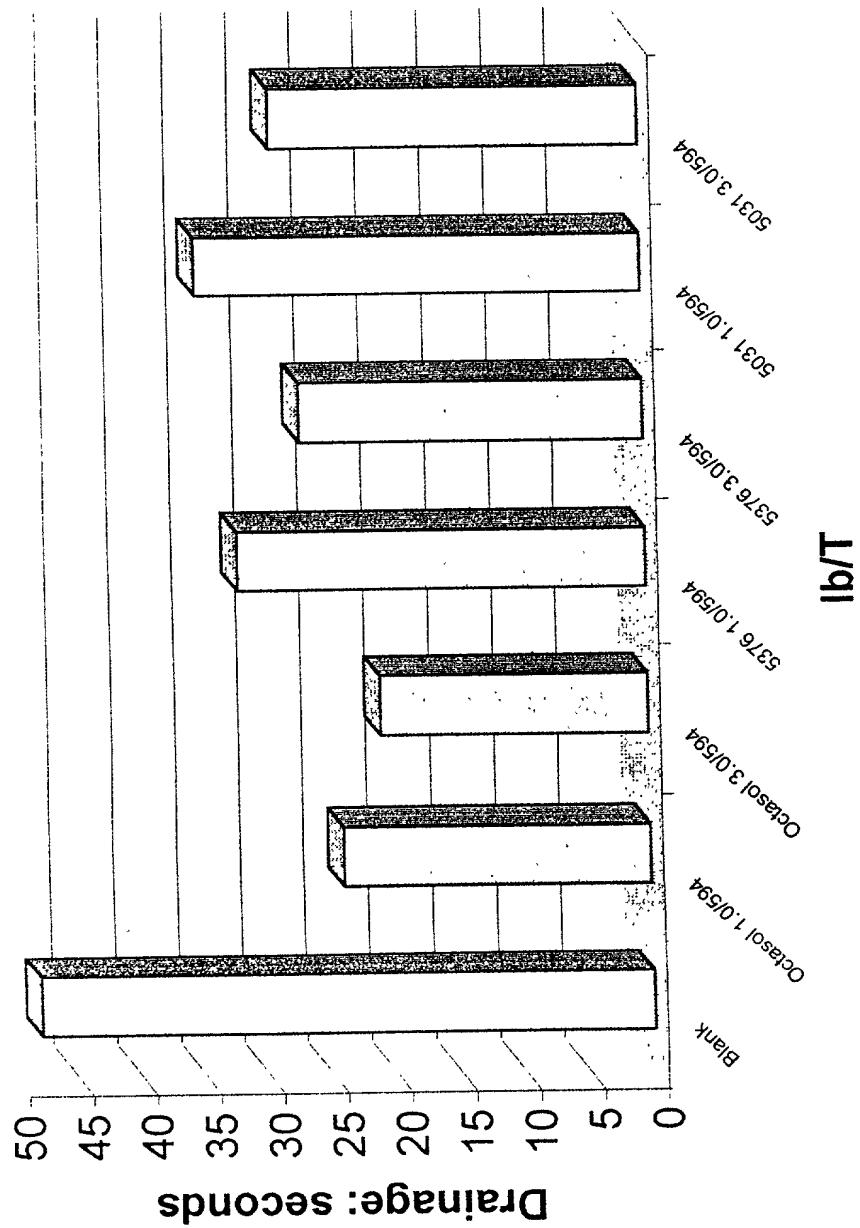


FIG. 8



20% Hard whites  
 40% manfold white ledger  
 40% hogged (tabloid news)  
 cationic demand - 0.6 meq/l  
 pH - 7.9

# Top ply

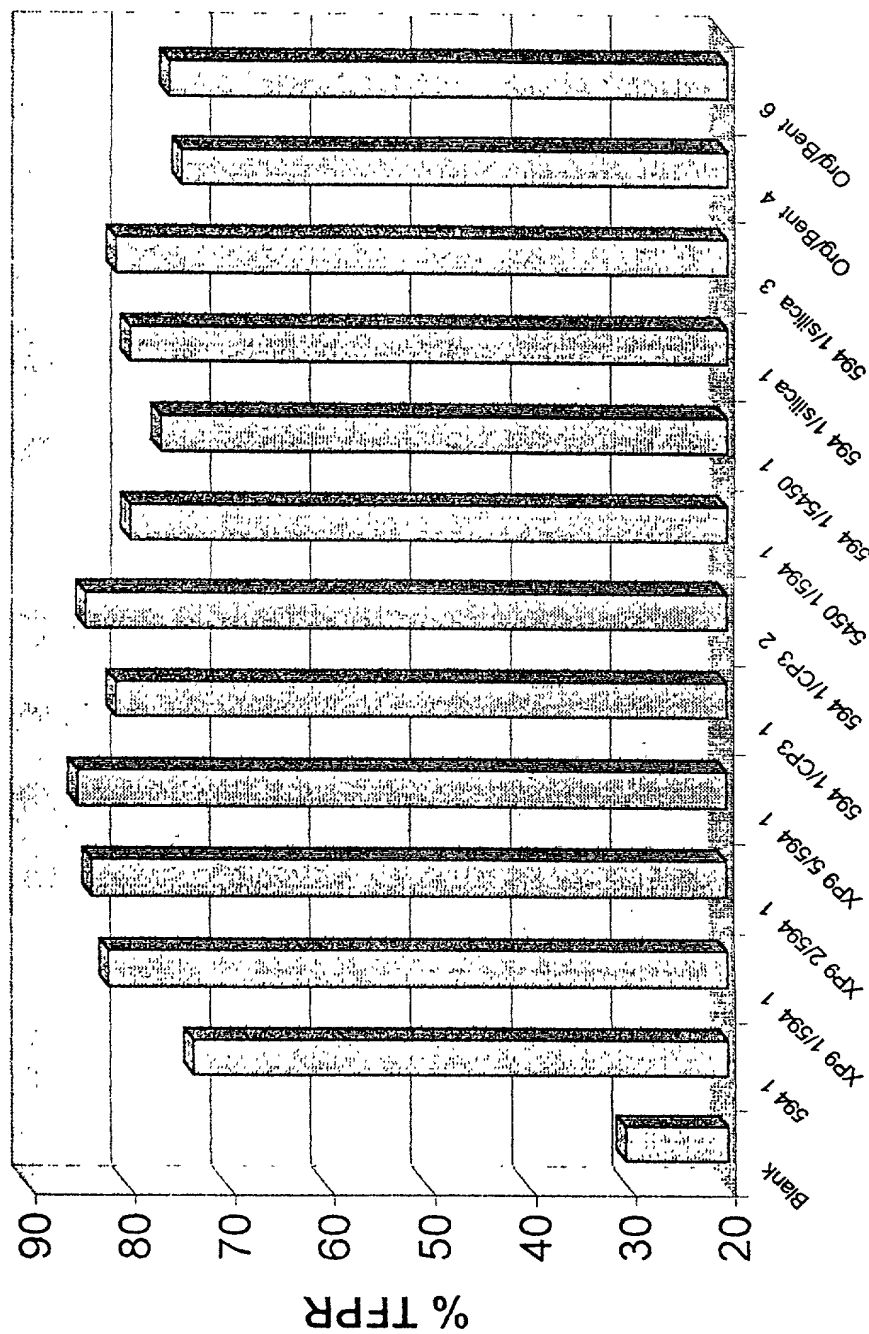


FIG. 9

20% Hard whites  
 40% manifold white ledger  
 40% hogged (tabloid news)  
 cationic demand - 0.6 meq/l  
 pH - 7.9

# Top ply

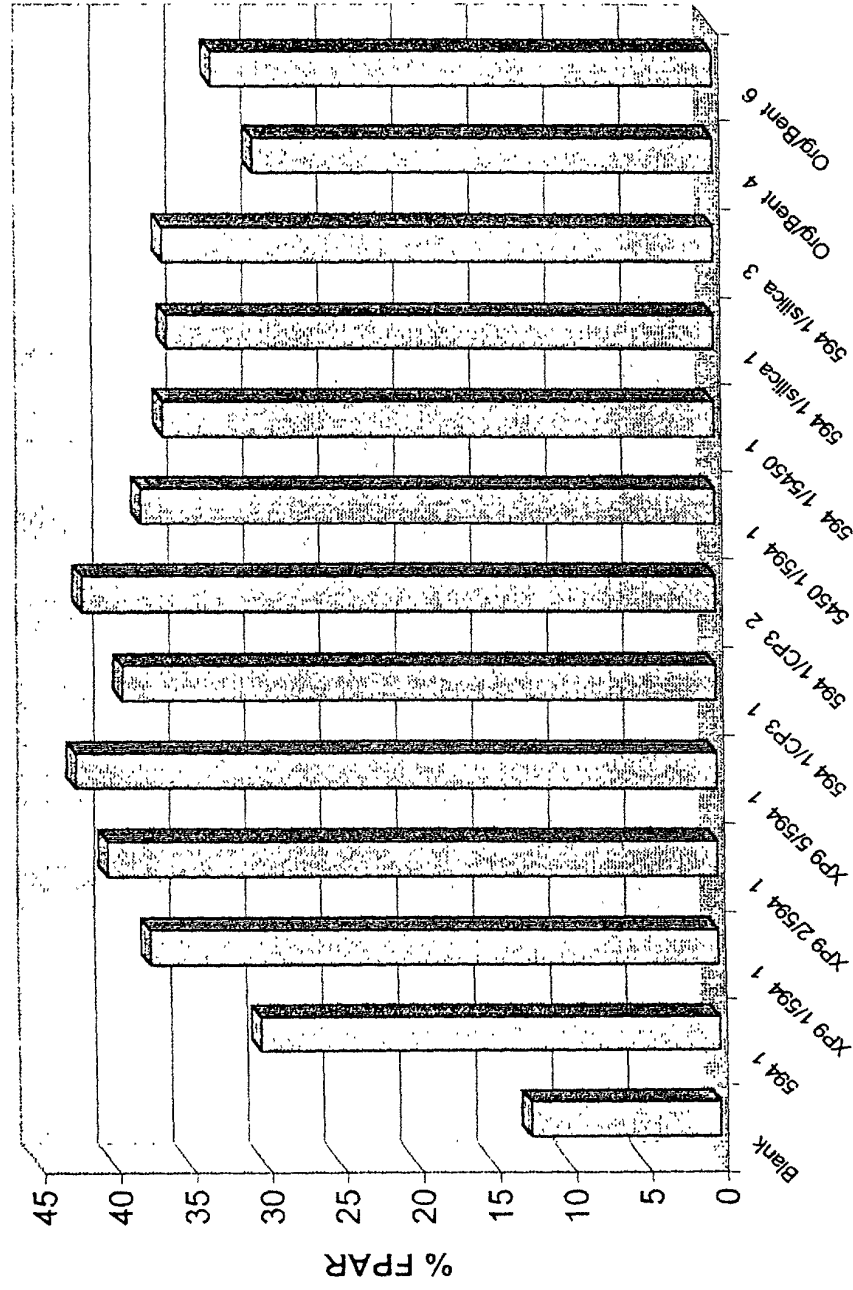


FIG. 10

30% Corrugated  
 60% box  
 10% ONP  
 pH - 7.4  
 Cationic demand - .4 meq/L

# Filler ply

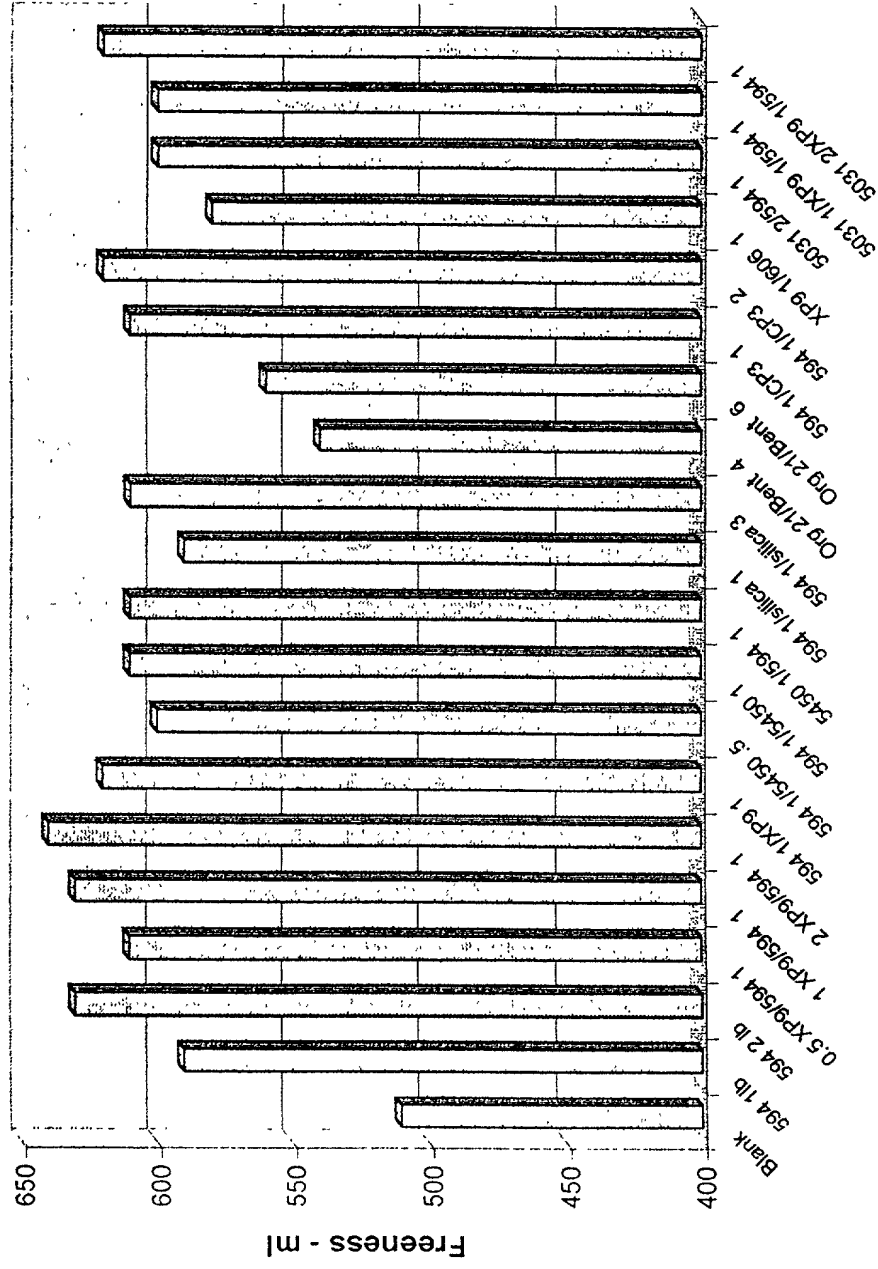


FIG. 11

100% ONP  
 pH - 7.85  
 Cationic demand - .55 meq/L

# Back ply

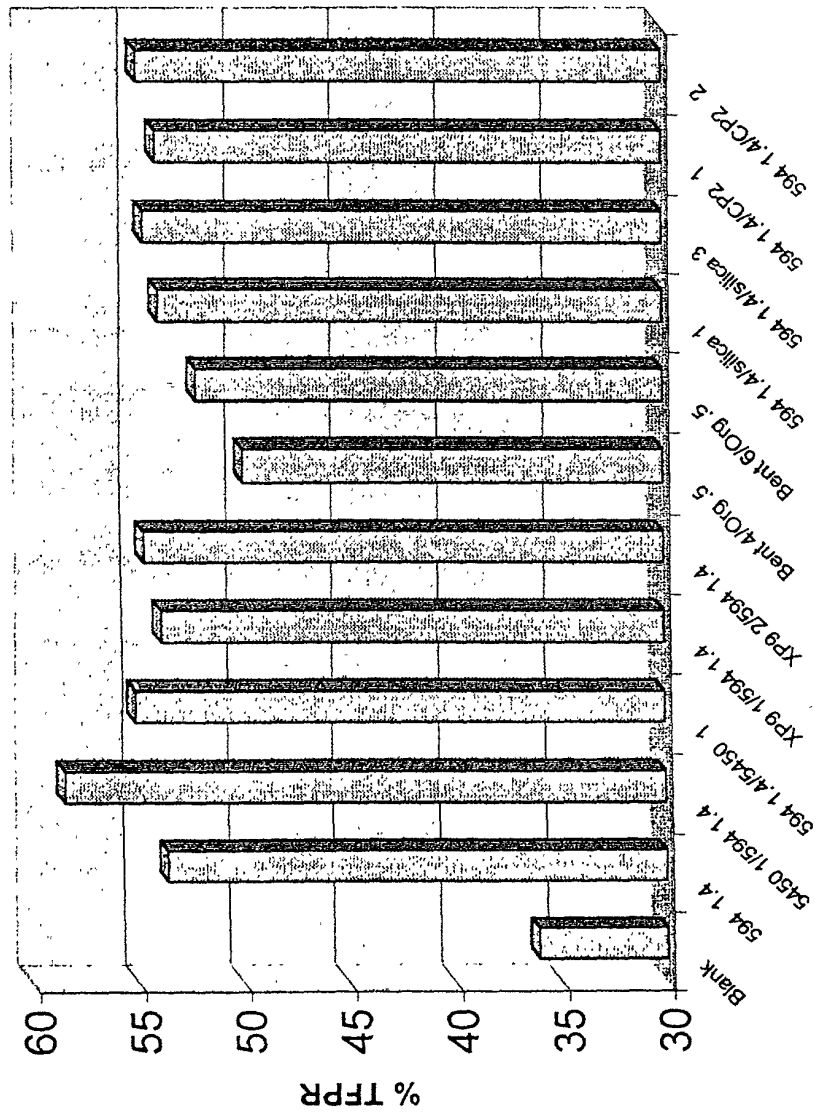


FIG. 12

15.5% Kraft blend  
 36.8% Mgo HWD  
 38.9% Fir  
 8.8% Broke  
 Conductivity: 1046  
 pH - 8.6  
 ASA - 2.1 lb/T  
 PCC - 280 lb/T

# TFPR:

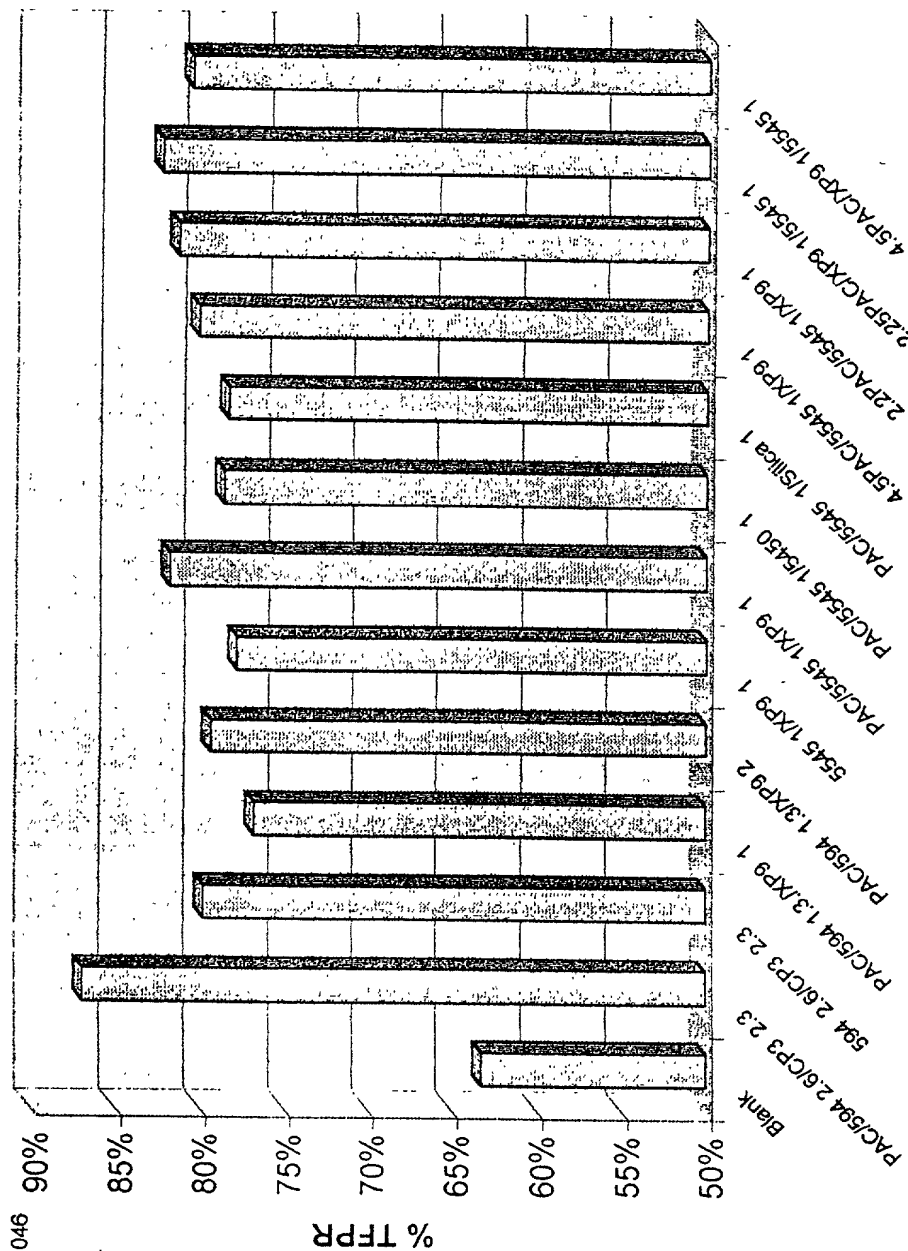


FIG. 13

15.5% Kraft blend  
 36.8% MgO HWD  
 38.9% Fir  
 8.8% Broke  
 Conductivity: 1046  
 pH - 8.6  
 ASA - 2.1 lb/T  
 PCC - 280 lb/T

## FPAR:

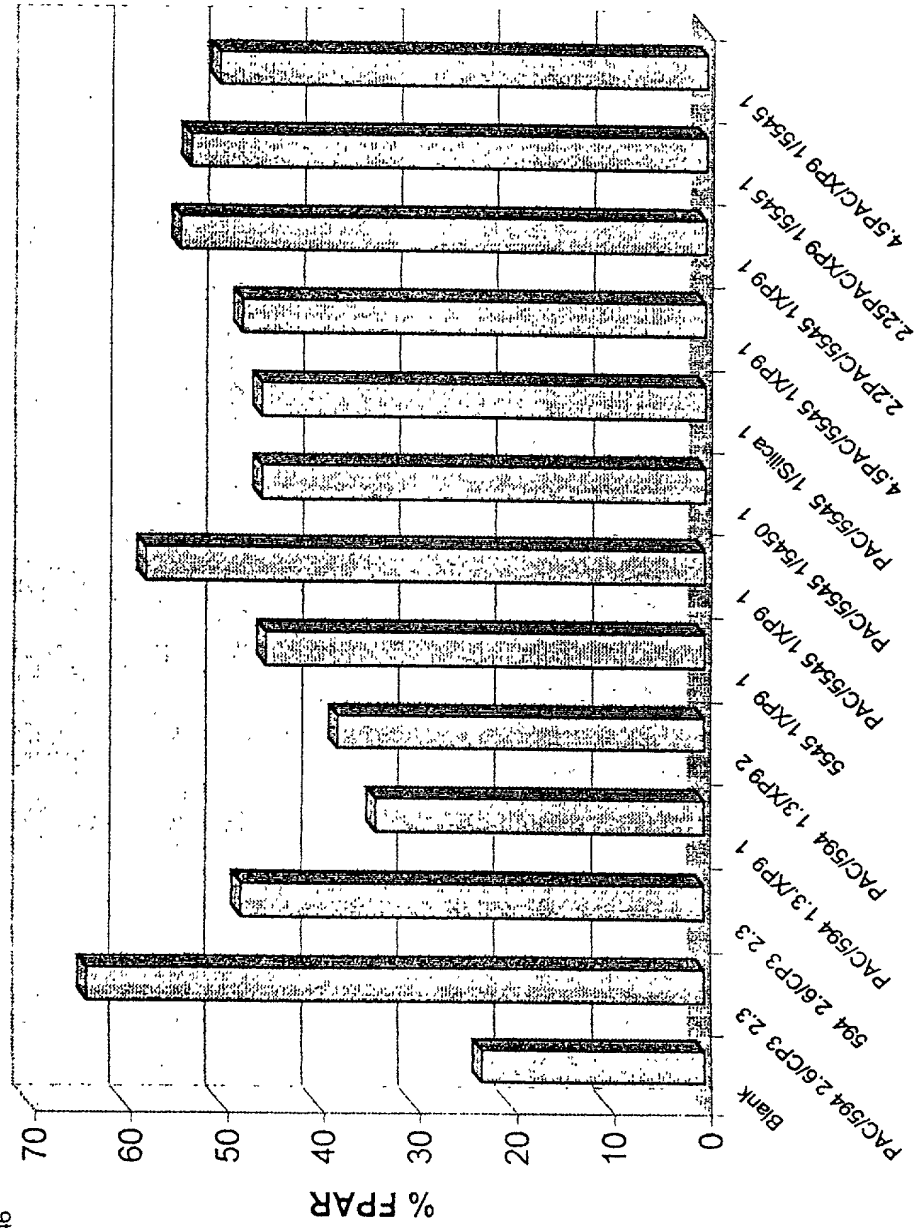


FIG. 14

15.5% Kraft Blend  
 36.8% MgO HWD  
 38.9% Fir  
 8.8% Broke  
 PCC - 280 lb/T  
 ASA - 2.1 lb/T  
 Conductivity 1005  
 pH - 8.3

TFPR:

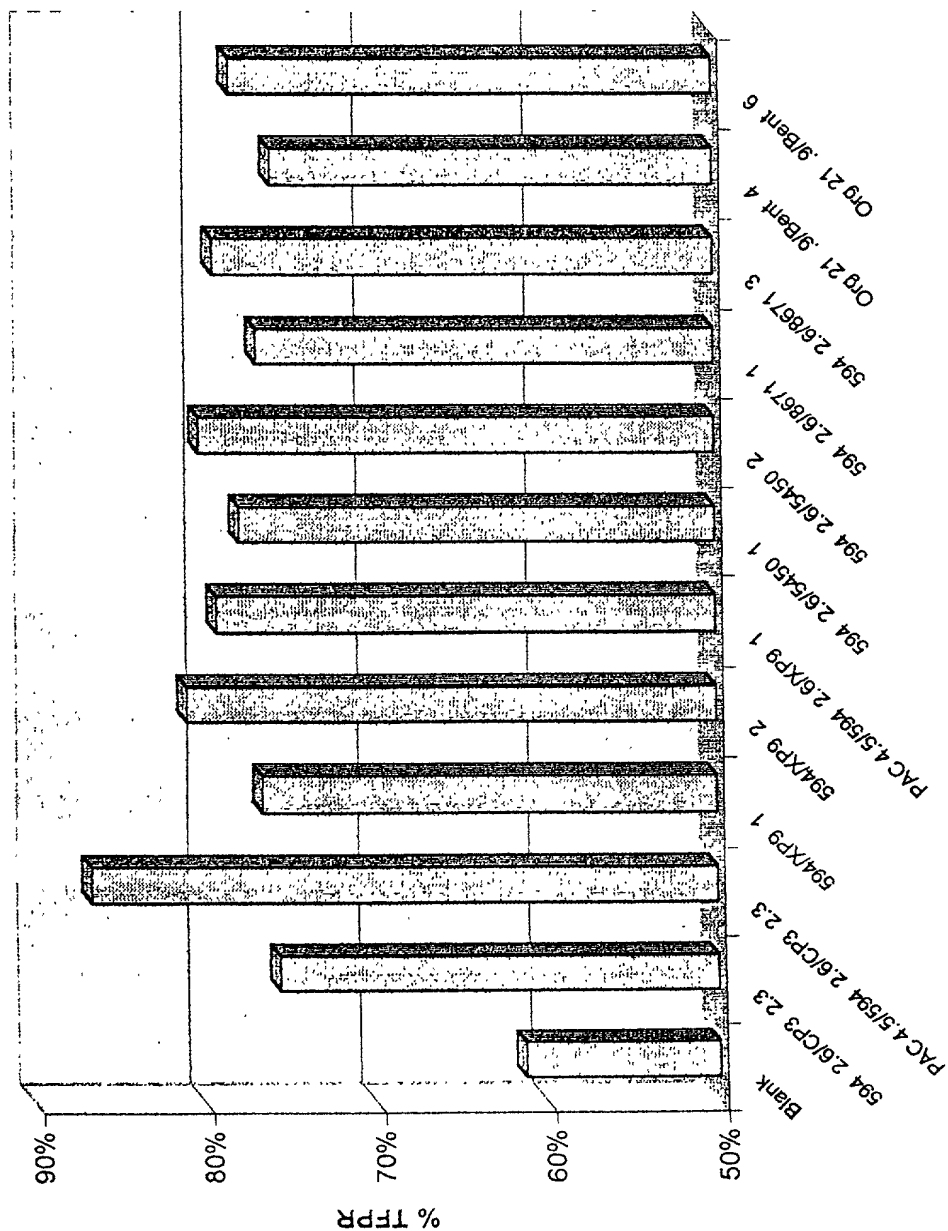


FIG. 15

15.5% Kraft Blend  
 36.8% MgO HWD  
 38.9% Fir  
 8.8% Broke  
 PCC - 280 lb/T  
 ASA - 2.1 lb/T  
 Conductivity 1005  
 pH - 8.3

# FPAR:

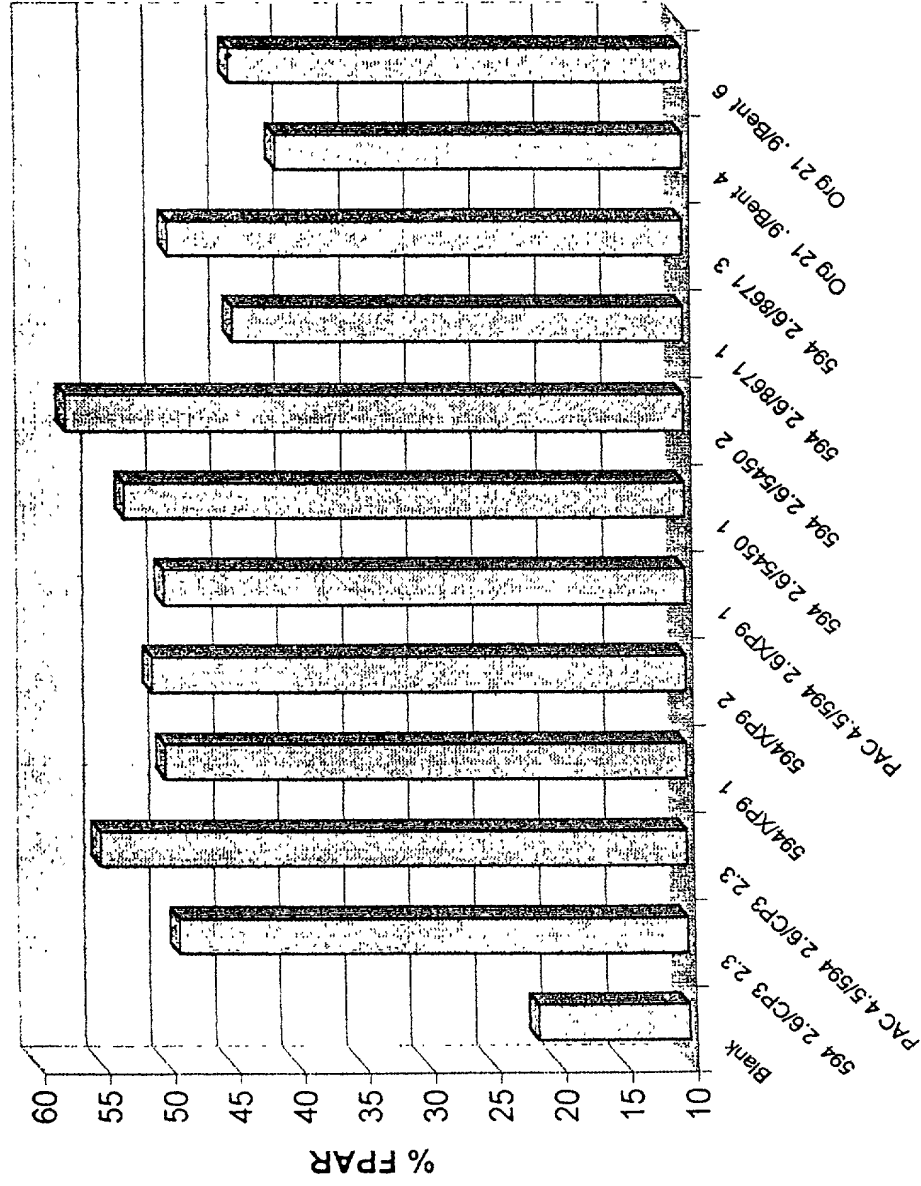


FIG. 16



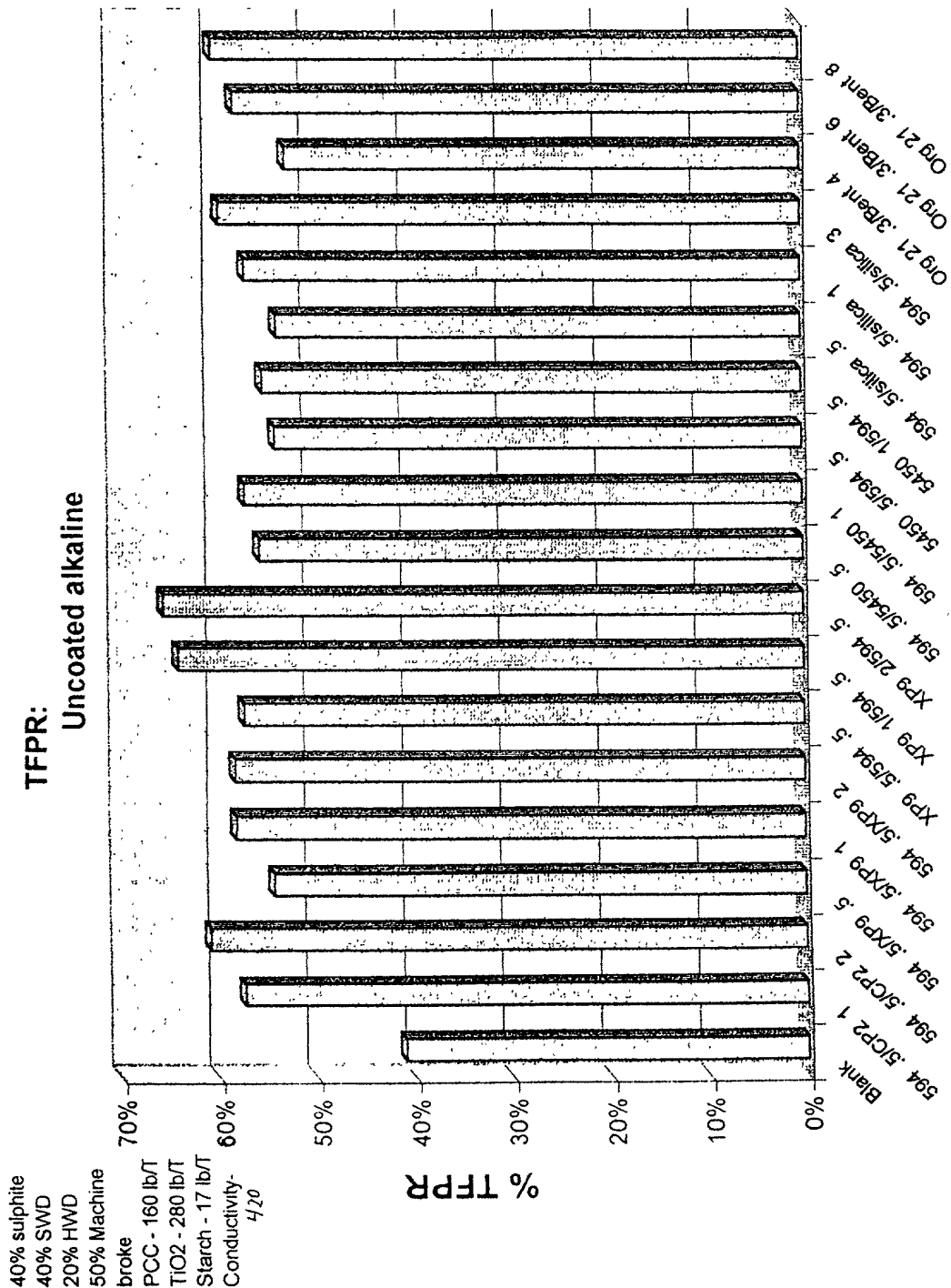


FIG. 17

**FPAR:**  
**Uncoated alkaline**

**broke**

PCC - 160 lb/ft

TiO<sub>2</sub> - 280 lb/T

Starch - 17 lb/ft

Conductivity- 420

pH - 8.5

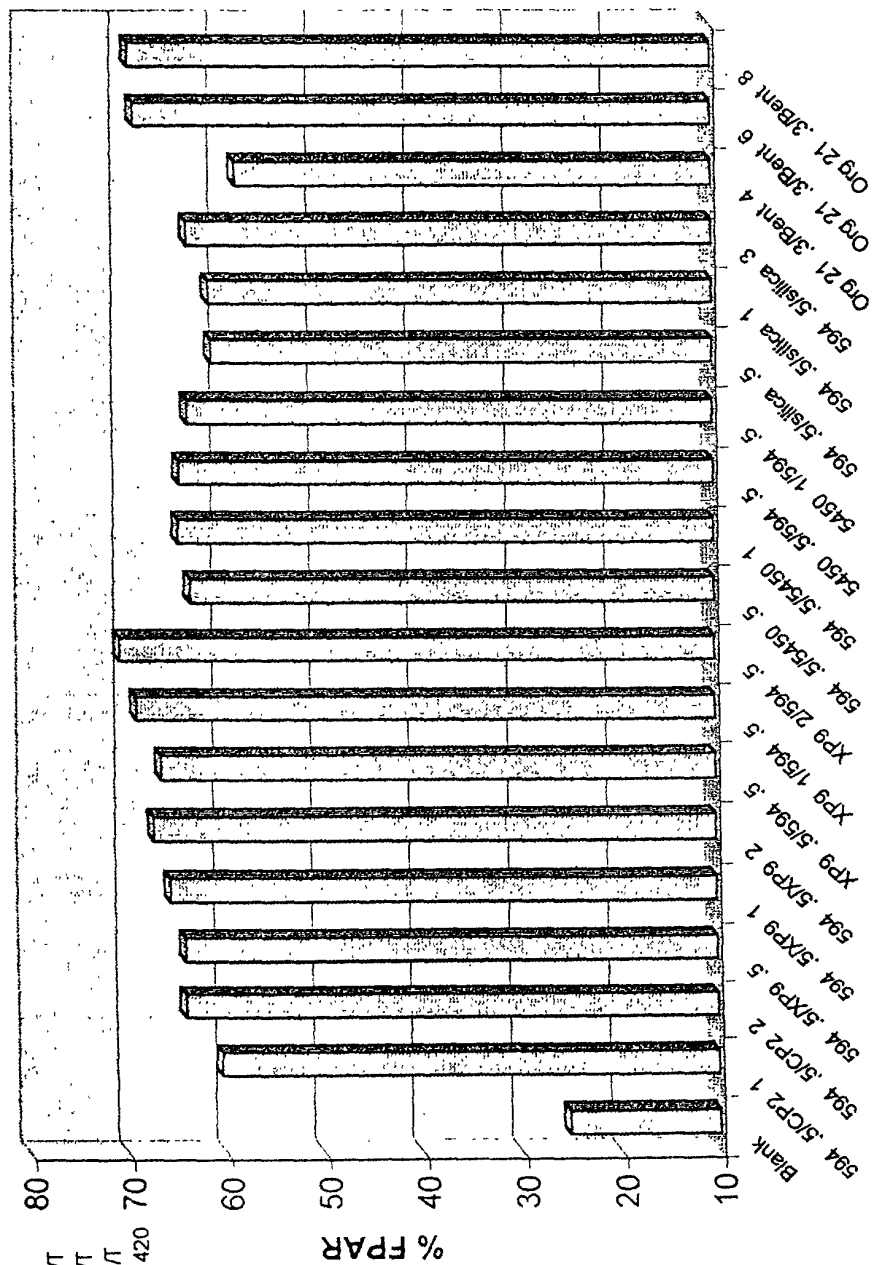


FIG. 18

40% GWD  
 47% Sulphite  
 13% SWD  
 15% Machine broke  
 20% Coated broke  
 Filler - 15lb/t  
 Starch - 25 lb/t  
 Alum - 6 lb/t  
 Conductivity -  
 pH - 6.2  
 Charge - .085 meq/l

**TFPR:**  
**Catalog - coated acid**

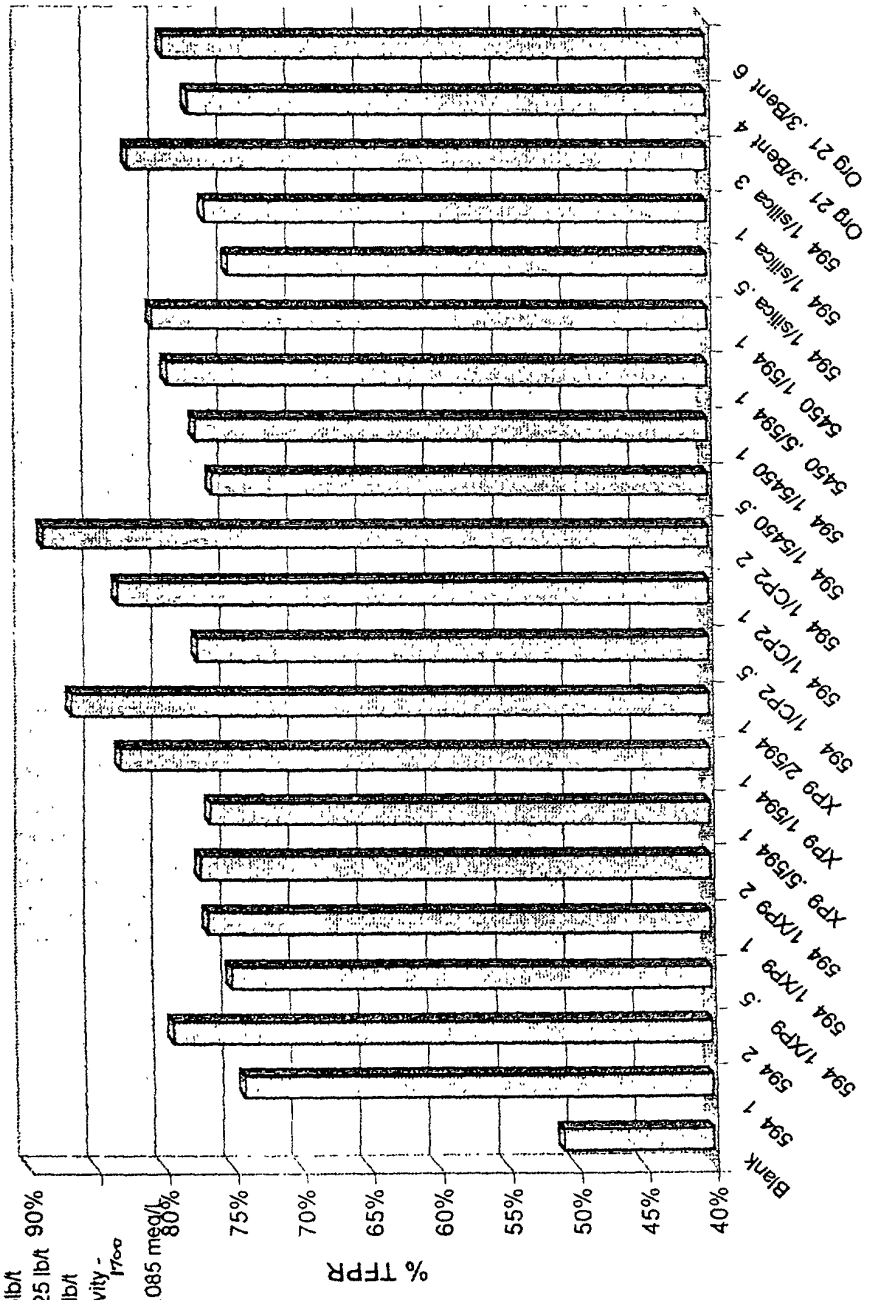


FIG. 19



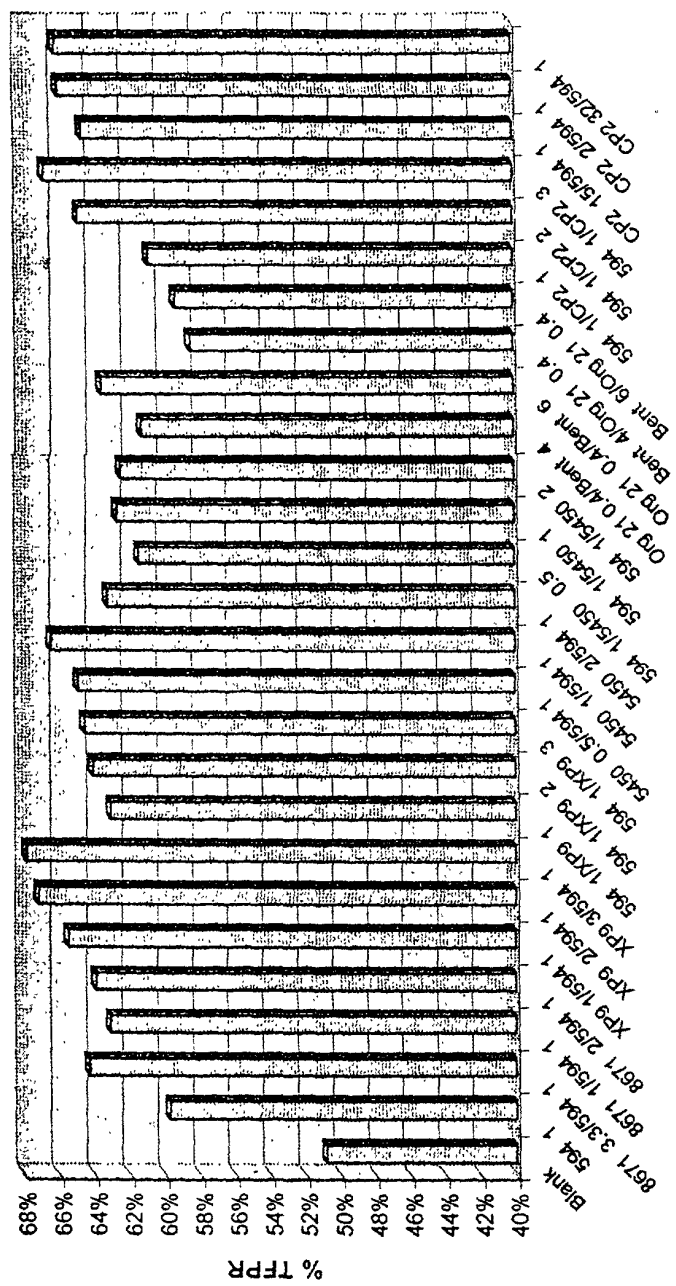


FIG. 21

# TFPR: Uncoated acid

10%Bleached sulfite  
40% unbleached gwd  
30% CDN/ONP  
10%Surger broke  
10% Machine broke  
5% bleached broke  
15% bond broke  
Conductivity-1064  
pH - 5.4  
Filler-60 lb/t  
Starch - 20 lb/T  
Alum - 22 lb/T

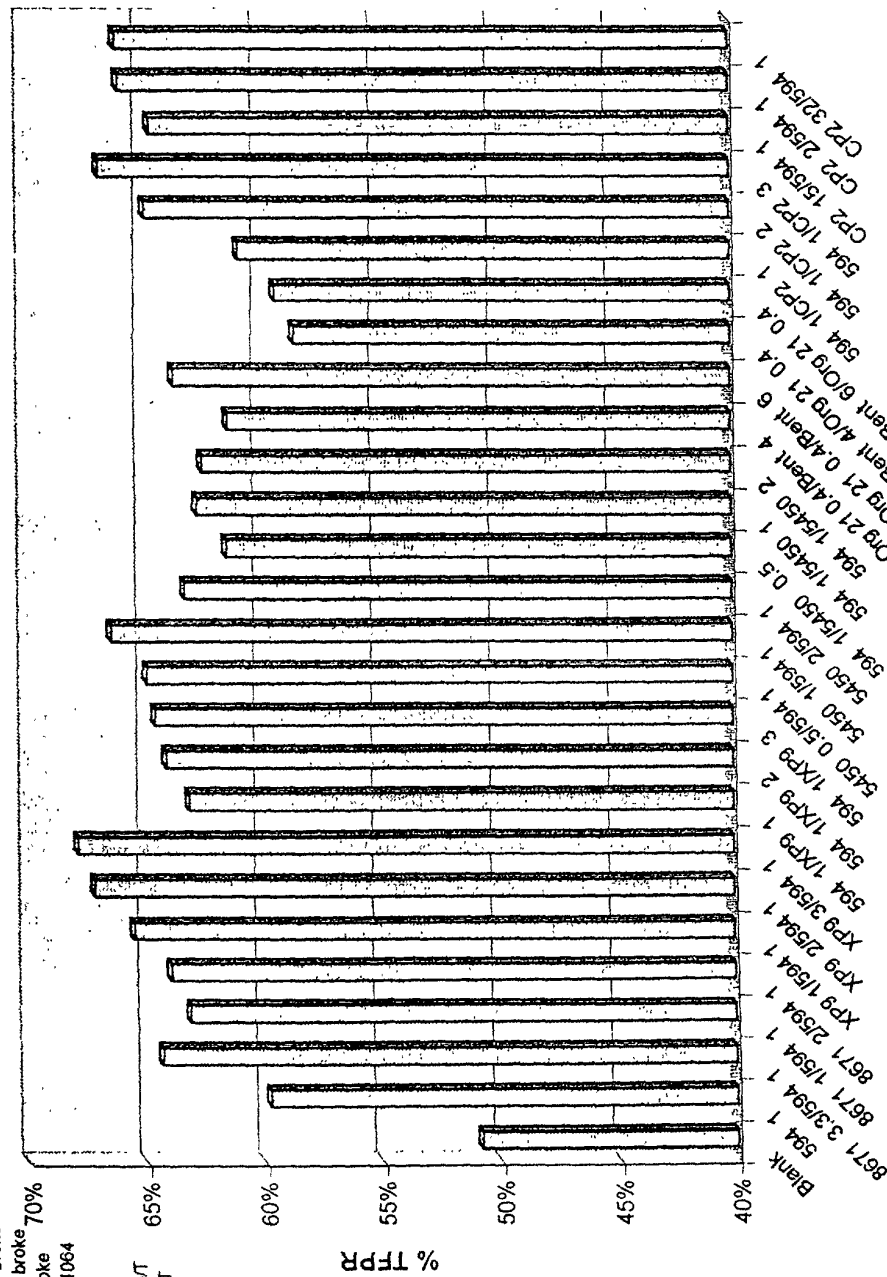


FIG. 22

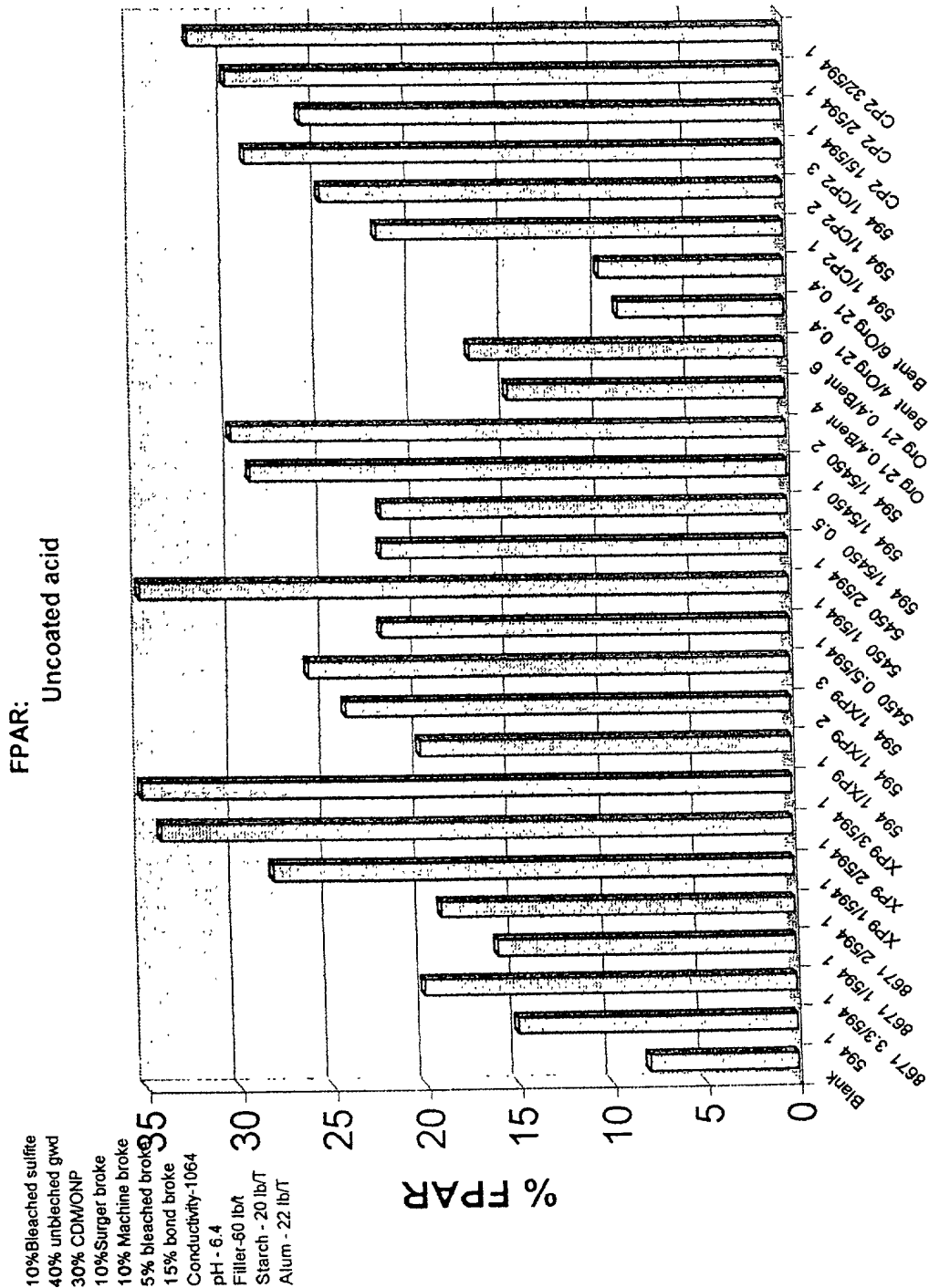


FIG. 23

## Alkaline Fine Furnish

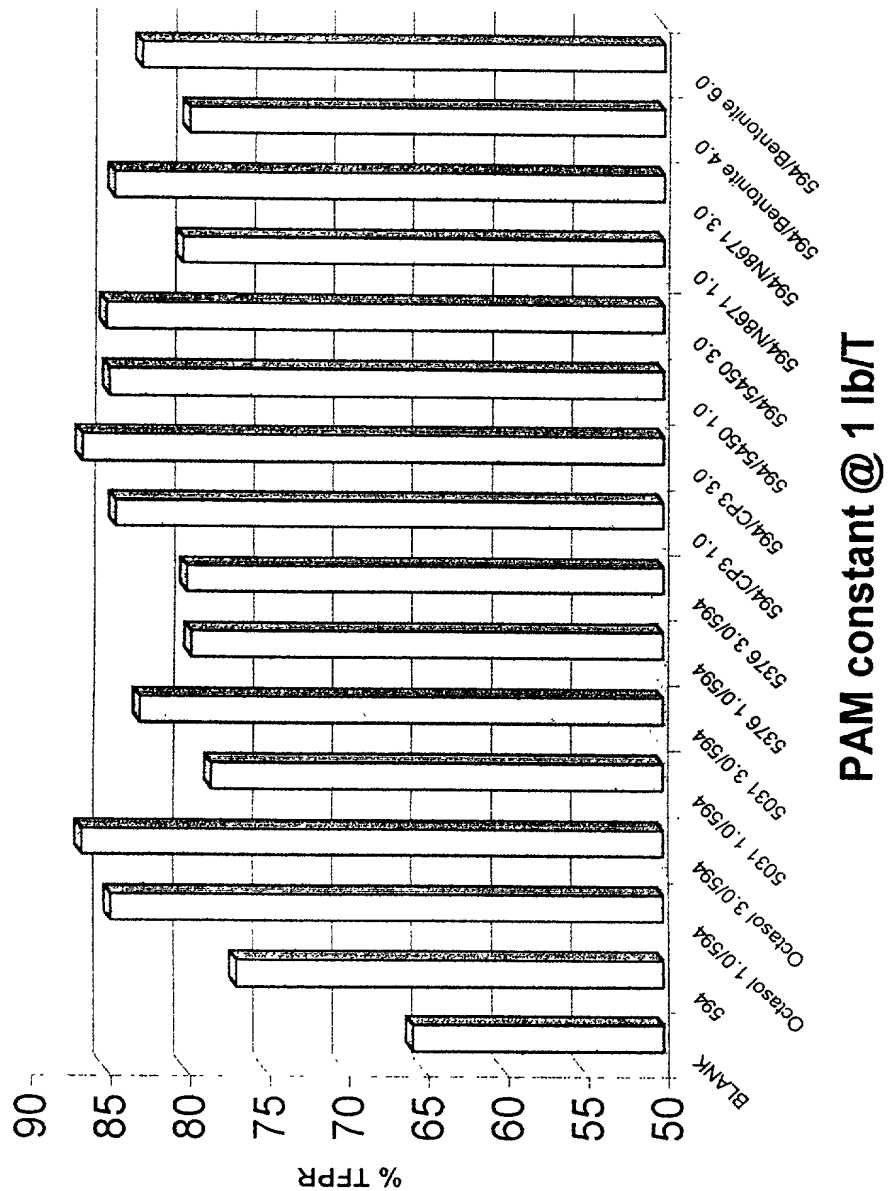


FIG. 24



100% 90% 80% 70% 60% 50%  
100% 90% 80% 70% 60% 50%  
100% 90% 80% 70% 60% 50%

## Octasol testing: TFPR

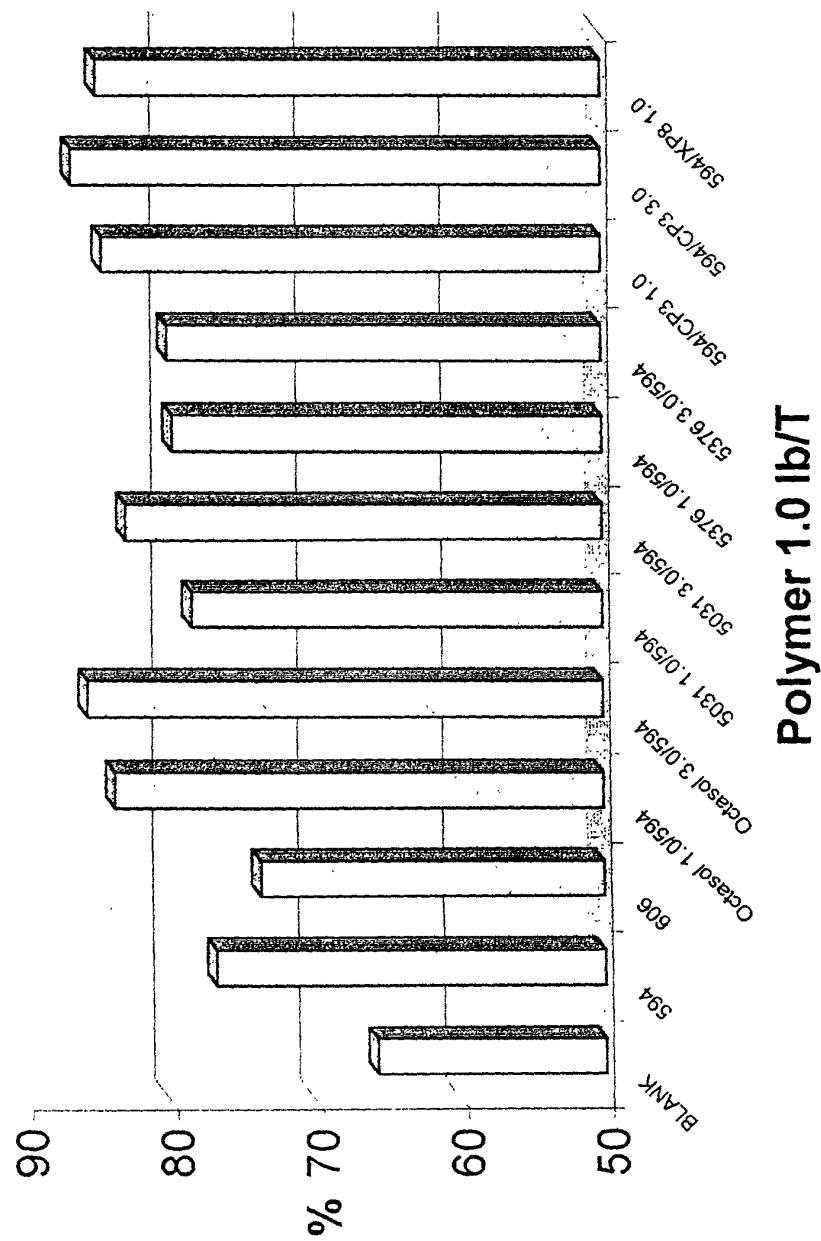


FIG. 25

Year	Age	Sex	Length	Wing	Tail	Culmen	Bill	Weight	Notes
1910	10	♂	180	110	80	15	15	100	Immature
1911	11	♂	185	115	85	16	16	110	Immature
1912	12	♂	190	120	90	17	17	120	Immature
1913	13	♂	195	125	95	18	18	130	Immature
1914	14	♂	200	130	100	19	19	140	Immature
1915	15	♂	205	135	105	20	20	150	Immature
1916	16	♂	210	140	110	21	21	160	Immature
1917	17	♂	215	145	115	22	22	170	Immature
1918	18	♂	220	150	120	23	23	180	Immature
1919	19	♂	225	155	125	24	24	190	Immature
1920	20	♂	230	160	130	25	25	200	Immature
1921	21	♂	235	165	135	26	26	210	Immature
1922	22	♂	240	170	140	27	27	220	Immature
1923	23	♂	245	175	145	28	28	230	Immature
1924	24	♂	250	180	150	29	29	240	Immature
1925	25	♂	255	185	155	30	30	250	Immature
1926	26	♂	260	190	160	31	31	260	Immature
1927	27	♂	265	195	165	32	32	270	Immature
1928	28	♂	270	200	170	33	33	280	Immature
1929	29	♂	275	205	175	34	34	290	Immature
1930	30	♂	280	210	180	35	35	300	Immature
1931	31	♂	285	215	185	36	36	310	Immature
1932	32	♂	290	220	190	37	37	320	Immature
1933	33	♂	295	225	195	38	38	330	Immature
1934	34	♂	300	230	200	39	39	340	Immature
1935	35	♂	305	235	205	40	40	350	Immature
1936	36	♂	310	240	210	41	41	360	Immature
1937	37	♂	315	245	215	42	42	370	Immature
1938	38	♂	320	250	220	43	43	380	Immature
1939	39	♂	325	255	225	44	44	390	Immature
1940	40	♂	330	260	230	45	45	400	Immature
1941	41	♂	335	265	235	46	46	410	Immature
1942	42	♂	340	270	240	47	47	420	Immature
1943	43	♂	345	275	245	48	48	430	Immature
1944	44	♂	350	280	250	49	49	440	Immature
1945	45	♂	355	285	255	50	50	450	Immature
1946	46	♂	360	290	260	51	51	460	Immature
1947	47	♂	365	295	265	52	52	470	Immature
1948	48	♂	370	300	270	53	53	480	Immature
1949	49	♂	375	305	275	54	54	490	Immature
1950	50	♂	380	310	280	55	55	500	Immature
1951	51	♂	385	315	285	56	56	510	Immature
1952	52	♂	390	320	290	57	57	520	Immature
1									

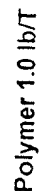


FIG. 26